Purpose and Need

1.1 Purpose

This Final Environmental Impact Statement (FEIS) for the U.S. 67 Expressway between Jacksonville and Macomb, Illinois has been prepared to identify the potential environmental affects associated with the proposed action in accordance with the National Environmental Policy Act (NEPA), the 1978 Council on Environmental Quality (CEQ) regulations, and the Federal Highway Administration and Illinois Department of Transportation guidelines.

This action will provide a modern high-type highway between Jacksonville and Macomb, Illinois. The proposed highway facility will provide improved transportation continuity, enhanced economic stability and development, upgraded rural access, and improved travel efficiency. The proposed action is one of a series of proposed actions connecting western Illinois and the communities of Jacksonville, Macomb, and Quincy to each other and to the interstate system in the Rock Island/Quad Cities area, the interstate system in the St. Louis area, and to major cities in central Illinois.

The proposed U.S. 67 improvement extends about **99** kilometers (**61.6** miles) from the Jacksonville West Bypass north to U.S. 136 near Macomb (Figure 1-1). The project study area involves four counties, Morgan, Cass, Schuyler, and McDonough, and encompasses a number of communities. There are five principal communities in the study area with a combined population **of nearly** 50,000: Jacksonville, Beardstown, Rushville, Macomb, and Meredosia. Smaller communities in the study area include Concord, Bethel, Arenzville, Chapin, Littleton, and Industry. South of the Illinois River, the study considers alternative alignments between existing U.S. 67 on the west and the Burlington Northern-Santa Fe (BNSF) Railroad on the east. North of the Illinois River, the study area generally follows existing U.S. 67, except for bypasses of Rushville and Industry.

1.2 History

The proposal for an improved highway between Jacksonville and Macomb has been considered for more than 25 years. During the last 8 years, efforts to improve U.S. 67 have been almost continuous. In 1988, interest in the U.S. 67 corridor was revived by a federal study to examine the feasibility of a 4-lane highway from St. Louis, Missouri, to St. Paul, Minnesota, called the Avenue of the Saints. One of the finalist alternative corridors investigated in this study followed U.S. 67 through the project study area. However, another corridor through Missouri, Iowa, and Minnesota was ultimately selected for development as the Avenue of the Saints. The Federal Highway Administration (FHWA) selected this corridor due to the cost difference between the two corridors. However, the FHWA acknowledged that the unchosen corridor following U.S. 67 would serve a greater

number of people, provide improved highway service to a larger population, and create greater savings in travel efficiency than the selected corridor.

Following the conclusion of the Avenue of the Saints Feasibility Study, there was sustained interest in an improved highway facility between Alton and the Quad Cities. In 1989, concerned business and community leaders formed a group called Corridor 67 to promote the need for a high-type highway in west central Illinois that would enhance the region's economic development potential.

The U.S. 67 corridor was described in the 1989 Illinois Department of Transportation (IDOT) publication *Lifelines to the Economy* as an "Economic Corridor." The study identified areas that were losing opportunities for economic development because of inadequate highways. *Lifelines to the Economy* designated U.S. 67 as a "Major Economic Arterial," which included federal and state routes serving cities that were not directly connected by an interstate highway.

IDOT initiated corridor feasibility studies for sections of U.S. 67 between Alton and the Quad Cities in 1990 and completed the study in 1995. The study concluded that an improved highway between Jacksonville and Macomb would provide the route continuity necessary to maximize economic opportunity in western Illinois.

The 1995 "Connecting Illinois, Illinois State Transportation Plan" enumerates six transportation planning policies and goals for the 21st century. One of the policies is to "target transportation investments to support business and employment growth and enhance the economy of Illinois." Compliant with the policy, the plan also named the U.S. 67 improvement project as a major new facility that would improve access and foster economic development.

1.3 Need

1.3.1 Transportation Continuity and Improved Economic Stability

Prior to the development of the interstate system, U.S. 67 was the main travel corridor from the Alton/St. Louis region to the Quad Cities. Although the national importance of U.S. 67 has diminished with the development of the interstate system, U.S. 67 remains a key regional corridor for the north/south movement of people and goods in and through west central Illinois. Several studies have indicated that a high-type facility between Alton (metropolitan St. Louis) and the Quad Cities would enhance the regional transportation system and bring a greater stability to the region's economic bases. The improvement between Jacksonville and Macomb is part of a statewide plan to provide greater access for all of west central Illinois and to link this major arterial to the interstate system.

Transportation is one of a number of factors important to the retention and attraction of economic development. In areas where other factors (i.e., economic incentive programs, good working relationships between government and industry, and a high quality labor force) are well developed but transportation is inadequate, transportation is crucial to

both the maintenance and attraction of economic development. The project area is characterized as having adequate programs for economic development (see the discussion in this section under *Economic Development*); however, the area lacks a uniform, efficient, and reliable north/south highway facility. Thus, in an area where the existing highway facility is compromising reliable travel times, transportation can be isolated as a key factor in attracting and retaining businesses.

One of the major goals of the Illinois transportation system is to enhance the state's economic advantage, expand economic bases in urban and rural areas, and retain existing economic bases and employment. A system of new and improved roadway facilities that link major economic markets is planned to strengthen the regional and statewide economic future. The U.S. 67 improvement project between Macomb and Jacksonville is part of a statewide plan to improve regional transportation continuity and enhance the linkage of west central Illinois to major economic markets.

There are large geographic areas in west central Illinois more than 32 kilometers (20 miles) from either an expressway or interstate facility. Notably, three areas are denoted in west central Illinois (Figure 1-2) stretching from the Quad Cities to St. Louis, the largest of which is the project area between Jacksonville and Macomb. Further, the project area is the single largest geographic area in the State of Illinois not served by a high-type highway facility. A recent industrial survey indicated that highway access ranked 2nd out of 23 categories of industrial site selection factors. Within the category of transportation, highway access was ranked higher than the other modal options. According to a survey of major businesses in Missouri (Missouri Highway and Transportation Department 1993), more than 60 percent of the business managers said that a location within 16 to 32 kilometers (10 to 20 miles) of an interstate highway was beneficial to their business.

The improvement of U.S. 67 between Jacksonville and Macomb would connect sections of highway to the north and south that are currently either under construction as 4-lane highways or are in the planning phase. The portion of U.S. 67 from Monmouth to Macomb is being constructed to expressway standards. Another section immediately south of the project area from Jacksonville to Godfrey has been allocated funds for the design of an expressway. The proposed project and the other sections will ultimately culminate in a 4-lane facility extending from St. Louis, Missouri, to the Quad Cities in Illinois. The proposed highway improvement between Jacksonville and Macomb is but one section of a much longer regional improvement. Therefore, the overall objectives of improved access, increased economic stability, and transportation efficiency between Alton and the Quad Cities would be seriously diminished without an improved highway between Jacksonville and Macomb.

U.S. 67 from Alton to Rock Island is a component of the National Highway System (NHS) in Illinois. The NHS was established to focus federal resources on roads that are vital to interstate travel and national defense, roads that connect with other modes of transportation, and those that are essential for international commerce.

The improved transportation facility would improve the stability of the region and reduce the potential for business and population out-migration. West central Illinois has three economic centers. The principle economic centers are Quincy (population 39,061), which is not located in the project corridor; Jacksonville (population 19,324), located at the southern end of the project corridor; and Macomb (population 19,952), located just beyond the northern terminus of the project.

These economic centers interact and provide the economic engine for the region; therefore, improved transportation to and from these centers is increasingly important. These centers feature the economic bases for the region, including diverse manufacturing, retailing, business services, and medical services. They also serve as agri-business centers for much of western Illinois. Jacksonville is the largest industrial/business center in the study area, and Macomb is the second largest. Major employers for the principle communities and others are shown in Table 1-1. The proposed improvement would help to retain these businesses and enhance the potential for economic growth.

TABLE 1-1Major Employers

Community	Major Employers	Number of Employees
Jacksonville ^a	Tenneco Packaging	1,050
	Capitol-EMI Music	730
	Passavant Memorial Hospital	710
	Jacksonville Developmental Center	530
	Hertzberg-New Method	500
	AC Humko	440
	Jacksonville School District 117	420
	Illinois School for the Deaf	275
	MacMurray College	240
	Bound to Stay Bound Books, Inc.	225
	Nestle Beverage Co.	172
	Jacksonville Journal Courier	160
	CEMA Distribution	160
	Illinois School for the Visually Impaired	145
	Illinois College	140
	Blue Cross/Blue Shield	140
	Lundia	130
	Warelubco	105
	AGI Inc.	100
Beardstown ^b	Excel Corporation	1,745
	St. Luke's Health Care Center	165
	BNSF Railroad	150
	Central Illinois Power Service Company	145
	Wal-Mart	130
	Rich Lumber	118
	Beardstown School District	99
	Illinois Glove Co.	80
	Myers Nursing Home	73
	Jefferson Smurfit Corp.	50
Meredosia/Naples ^b	National Starch & Chemical Company	275
	Central Illinois Public Service Company	150
	Meredosia-Chambersburg Unit School	72
Rushville b	Rushville Schools	163
	Schuyler County	110
	Culbertson Memorial Hospital	110
	Snyders-Vaughn Haven Health Care Center	82
	Bartlow Brothers Meat Packers	60
	Schuyler-Brown F.S. Inc.	55
Macomb ^a	Western Illinois University	2,470
Macomb 4	NTN-Bower	600
	McDonough County Hospital	570
	Marriott Corporation Food Service	500
	Zeta Consumers Products Corp.	400
	Webster Industries	360
	Cooper Power Industry	230
	Bridgeway Inc.	225
	Haeger Pottery	125

TABLE 1-1Major Employers

Sources: Illinois Services Directory 1996

Community Profiles for Rushville and Beardstown; CIPS Economic Profiles of Morgan and McDonough Counties; DCCA Illinois Manufacturers Directory 1995

Some of the economic advantages offered by improved highway service are:

- Reduced freight costs due to time and maintenance savings
- Greater supply options
- Improved access to an expanded labor market
- Improved travel time reliability (very important to the current trend in just-in-time delivery systems)

All of these elements are required to remain competitive in a global market.

The work force in the study area is characterized as highly mobile (Table 1-2). Morgan (Jacksonville) and McDonough (Macomb) counties are economic centers that import workers from other areas. For example, approximately 4,000 people travel to Morgan County for work (per workday), making it a commuter-import county. Similarly, about 2,400 people travel to McDonough County for employment. Travel routes to the economic centers currently consist of county roads and state 2-lane highways. Table 1-2 indicates employee travel characteristics. The proposed highway improvement would provide reliable commute times, a direct and safe travel route, and improved access to a potentially expanded labor market.

TABLE 1-2 Employee Travel Characteristics

County	Number of Workers	Commute to County	Percent of Total	Commute Out of County	Percent of Total
McDonough	16,618	2,403	14%	NA	
Cass	5,940	1,519	26%	1,935	33%
Schuyler	3,199	80	3%	1,209	38%
Morgan	18,477	4,065	22%	NA	

Source: U.S. Bureau of Census 1990

1.3.2 Rural Access

Transportation requirements in rural areas are substantially different from urban areas. Rural areas typically strive to improve access, whereas urban areas focus on relieving congestion. Many rural areas in the state have poor access to activities and services, including emergency services. Improved access to rural areas is becoming more important

^a Major employers over 100

b Major employers over 50

as community facilities and services are consolidating in urban areas. For many residents in the project area, travel distances to major services and activities are prohibitive. Although improved access to rural areas is rarely cost efficient, these improvements are required to meet the essential travel and safety needs of rural residents.

The project area is comprised of several small communities and many farmsteads. A large percentage of the population in the four-county project area is rural residents. Approximately 37,000 people, or 43 percent of the total population, reside in small communities or on farmsteads. The remaining population resides in the four major communities in the area. The proposed U.S. 67 improvement would result in a high-type highway facility that would greatly improve access for rural residents to the nearby urban centers of Jacksonville, Beardstown, Rushville, and Macomb, where employment, activities, and medical services are available.

1.3.3 Travel Efficiency

The proposed improvement of U.S. 67 would result in more uniform, reliable travel service. The proposed U.S. 67 improvements would provide several vehicle user benefits: reduced average travel time, reduced crash rates (improved safety and reduced costs), and improved traffic flow (reduced operating and environmental costs).

The existing alignment and character of U.S. 67 produces a number of problems that compromise traffic operations along the route. Operational issues include reduced speed limits in the communities of Chapin, Bethel, and Industry; signalized intersections at high-volume locations in Rushville and Beardstown; no-passing zones at locations with insufficient sight distances; and slow-moving farm equipment. The combination of these travel impediments causes delays along the route and potentially hazardous travel conditions along a facility intended for high speeds.

The Average Daily Traffic (ADT) volumes on various sections of U.S. 67 for the design year (2030) vary from 5,000 to 17,400 vehicles per day (vpd). Travel volumes are expected to increase by from 35 percent to 160 percent between 2000 and 2020, and by from 60 percent to 200 percent between 2000 and 2030. The increased traffic volumes will further slow travel times through the study area and reduce travel reliability, thus providing a further deterrent for economic growth. By the design year, traffic volume on portions of the existing highway will also exceed IDOT's travel criterion of a maximum of 800 vehicles per hour on a 2-lane rural highway.

Level of Service (LOS) is a term used to describe the operational quality of a given roadway design. The *Highway Capacity Manual, Special Report 209, 2000 edition* (referred to as the HCM) is the transportation profession's reference document for characterizing highway operations. LOSs range from A (high speed, no congestion) to F (congestion with demand volume exceeding the capacity of the road). The traffic volume on portions of U.S. 67 in the design year would exceed the maximum service volume for LOS C, which would be the operational criterion for this type of highway.

Travel in the corridor is characterized by higher-than-average truck traffic, which comprises about 18 percent to 30 percent of the ADT. The normal proportion of truck traffic on a highway such as existing U.S. 67 would be about 10 percent. A large percentage of the truck travel is long distance, further supporting the need for a facility that can provide higher average speeds and travel reliability.

An analysis was made of the crash history of U.S. 67 for 1991, 1992, and 1993. Crash rates (number of crashes per million vehicle miles [MVM] driven) were calculated for 12 sections along U.S. 67 for fatal and injury (F&I) crashes, property damage (PD) crashes, and total crashes. The average crash rate for the total length of U.S. 67 in the study area was 1.23 crashes per MVM. This is exclusive of animal/vehicle conflicts, which were not included in the analysis. The statewide average crash rate for 2-lane rural highways during the same 3-year period was 0.87 crashes per MVM. Therefore, the existing highway has a crash rate approximately 40 percent greater than the statewide average. Research and actual experience confirm that the proposed improvements would produce a demonstrably safer facility. Head-on collisions and sideswipes of two vehicles traveling in opposite directions would be nearly eliminated by a wide median separating opposing travel lanes. An improved roadside would also reduce the incidence of single vehicle collisions with fixed objects beside the road. Illinois statewide data indicate that a reduction in the total crash rate of approximately 26 percent would be expected when converting a 2-lane rural highway to a 4-lane divided facility.

1.3.4 Economic Development

As stated in the *Illinois State Transportation Plan*, it is intended that transportation investments support business and employment growth and enhance the economy. Communities in the study area support this policy and the pursuit of development of the Alton-Jacksonville-Macomb corridor. High-type roadways (expressways and freeways) are critical threads in the economic fabric of a region in terms of the movement of people and goods, economic development, and business location decisions.

The relationship between highways and other forces shaping our communities and economic development is a function of several factors. Two recent studies illustrate the importance of highway access and other factors in economic development decisions. A study by *Industry Week* magazine surveyed subscribers' views on industrial location factors. The locational criterion most mentioned by respondents was roadway access for trucks (79 percent). Other criteria included availability of labor and favorable community attitude toward industry.

Another survey of industrial representatives in the cities of Bloomington/Normal, Decatur, and Champaign/Urbana cited the relative importance of various factors considered in industrial location decisions (Hartgen). Factors such as labor supply and financial incentives were considered key, but the availability of a 4-lane highway also was considered extremely important. Access to a 4-lane highway facility has consistently ranked in the top five factors affecting economic development decisions.

Most manufacturing companies prefer to be within 16 kilometers (10 miles) of a high-type highway. The population centers in the study area are clearly disadvantaged in the location selection process because of poor access to a high-type highway network. The nearest north/south 4-lane highway is more than 75 kilometers (50 miles) to the west and about 100 kilometers (62 miles) to the east. The study area is one of the few areas of this size in the midwest region of the United States and in Illinois that is not served by a north/south 4-lane highway connecting to the interstate system. The Avenue of the Saints Feasibility Study found that U.S. 67 would serve the greatest number of communities currently unserved by a 4-lane north/south highway, and would produce the highest travel efficiency and economic development benefits of any of the finalist alternatives.

The study area has shown little growth in the last two decades. During this period, population declined and employment increased only slightly. An examination of the current economic development patterns in the study area show that the existing transportation attributes of the area have influenced development patterns. Food processing and other agri-businesses are located at the major bridge crossings on the Illinois River, i.e., Beardstown and Meredosia. Also, the area from Beardstown to Naples on the Illinois River has evolved as the agri-business transportation center for west central Illinois. Non-agricultural development has occurred in Jacksonville and Rushville, where national east/west highways such as I-72 and U.S. 24 cross U.S. 67.

The major communities in the study area (Jacksonville, Macomb, Rushville, and Beardstown) support the proposal for a new north/south high-type highway. Shippers from Jacksonville are seeking improved access to Iowa and other northern and western U.S. markets. Shippers from the Macomb area are seeking improved access to I-72 for eastern, southern, and western U.S. shipment, whereas shippers from Rushville and Beardstown are seeking improved access to all markets. The Beardstown Economic Development Administrator has stated, "We've always had the river, and the railroads…but we need to fix the highway."

There is general agreement among local businesses and prior studies that the project area lacks a highway facility that provides travel reliability through the study area and to destinations outside the study area. To attract business, the area served by U.S. 67 must be competitive with other areas. It must be connected to the interstate system by a high-type, north/south highway that would provide safe, convenient, and reliable travel to regional and national markets. U.S. 67, as it now exists, is a constraint to economic development. The existing 2-lane highway, which is characterized by high truck volumes, slow speed sections of highway through small communities, and inadequate vertical and horizontal curves, does not guarantee reliable travel times. Industrial location decisions consider the availability of a 4-lane highway important because it offers the travel time reliability needed to reduce maintenance and operation costs and improve the delivery and shipment of materials and goods. Therefore, if a high-type highway provides faster, more reliable transportation at lower costs, it would effectively reduce the cost of doing business in the region, thereby increasing the competitive advantage of the study area.

Business leaders in the region indicate that the area is poised for economic development. They are confident that the region has the essential attributes, with the addition of an improved highway, to attract economic development. Two of these assets include the area's proximity to much of the nation's business and industrial activity and the area's prominence in agri-business. The communities in the area worked diligently, together and individually, to initiate programs to retain existing employers and attract new economic development. Three of the major communities in the project area have established enterprise zones with tax abatement and credit programs that would benefit new industry or expansion to existing businesses. Tax Incremental Financing districts are also common in the area, particularly in the downtown business districts. Industrial parks have been developed with the appropriate infrastructures in Jacksonville, Macomb, and Beardstown. At least two of these communities offer incentives and discounts on the cost of industrial property to prospective industries. Other financial incentives are available to most business ventures in each of the major communities, such as revolving loan funds and gap financing. Each of the communities has a strong alliance between government and industry. In Jacksonville, at least five organizations have been established that focus on economic development. In Macomb, Rushville, and Beardstown, the number of economic development organizations and interests are equally impressive. Overall, the economic organization and financial incentives available to the area are mature and well developed.

There are myriad other factors in the area that provide for an economic development vision with a potential for success, especially its labor force. It is characterized as loyal, possessing good work ethics, having a low absentee rate and good demographic mix, and having a high potential for upgrading its skill level. Other important factors include a reasonable labor cost in the area and a high quality of life. Job training is also available through federal- and state-funded programs. Each community practices rigorous fiscal restraint, placing some of them in an excellent position to respond to the fiscal demands of economic growth.

The most compelling argument for highway improvements that influence economic development exists when all of the other critical economic factors are present in the area except a high-type highway facility. In these cases, the transportation investment represents the last critical ingredient needed to make the area economically successful. The project area fits this profile. They have all the essential ingredients for economic growth, but lack the last critical item, which is an improved north/south highway.